CAPSULE SUMMARY OF ACTIVE TASKS

July 1, 2005

UNITED STATES MEMBER STATE SUPPORT PROGRAM TO IAEA SAFEGUARDS

DEPARTMENT OF ENERGY
DEPARTMENT OF STATE
NUCLEAR REGULATORY COMMISSION
DEPARTMENT OF DEFENSE

INTERNATIONAL SAFEGUARDS PROJECT OFFICE BROOKHAVEN NATIONAL LABORATORY UPTON, LONG ISLAND, NEW YORK 11973

Currently Active Tasks

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		Title		_		
	Subtask		[Agency# / Task Officer]	Organization	Total Budget	Total Spent Comments
A.116		Field Support Instruments and Technic [USA A 931 / R. Carchon]	ques			
			ORNL	\$155,336.00	\$155,337.00	
						There was no activity scheduled for this quarter.
	A.116.83		LANL	\$248,000.00	\$237,650.00	
				, ,		Cascade Header Enrichment Monitor - There has been no activity reported for this quarter.
A.200		Environmental Sampling and Analysis [USA B 817 / V. Henry]	Support			
			ISPO	\$162,700.00	\$162,700.00	
A.202		Separation of Plutonium Isotopes for t High Purity Spike Reference Materials [USA A 909 / D. Donohue]				
			LANL	\$17,100.00	\$17,100.00	
						There has been no activity reported for this quarter.
			NBL	\$77,225.00	\$60,115.00	
						Steven Goldberg attended a Steering Committee meeting on the FP-33/Pu-244 project on May 27, 2005, at the IAEA. The committee discussed the shipment of US feed material to the IAEA, the status of Russian enrichment capabilities, the IAEA-VNIIEF contract for the enrichment of Pu-244, and the analysis of FP-33 material prior to shipment. Dr. Goldberg met with Dr. Stanislav Vesnovskii of VNIIEF and Dr. Maxim Penkin of the IAEA to discuss the possible purchase of Russian Pu-244 for the project.
			ORNL	\$127,284.00	\$77,187.00	
						The Memorandum of Understanding (MOU) between the Department of Energy and the IAEA for this project has been signed. ORNL is

Energy and the IAEA for this project has been signed. ORNL is assessing the project requirements related to shipping the feed material to the IAEA, to assure that adequate funding is available and that there are no problems to deter the completion.

TaskID 8	Subtask	Title Controlled Potential Coulometry of 1 m Coulometer [USA A 1049 / S. Balsley]	[Agency# / Task Officer] g Pu with SRL	Organization Total	l Budget	Total Spent Comments
			SRNL	\$334,023.00		Michael Holland (SRS Analytical Laboratories) visited SAL from April 18 to 27, 2005. Statistically significant systematic errors had been observed in the measurement results for several types of certified reference materials (CRM) for several months. The SRS Coulometer at SAL has been returned to service, after troubleshooting and testing by SRS. The significant systematic measurement error has been eliminated. Both the random and the systematic uncertainties in the SAL analytical capabilities for coulometric assay of plutonium have been returned to well within the quoted reliability for the measurement system. This measurement reliability is within the international target values for safeguards measurements and within the data quality objectives for the analytical activities performed at SAL.
A.223		Technical Support to the Clean Laborat [USA A 1081 / D. Donohue]	tory			
	A.223.09		LANL	\$107,000.00	\$28,000.00) Clean Laboratory Training at LANL and SAL - Taeko Shinonaga will visit

A.233 NDA Verification Techniques for BRN Enrichment

Plant

[USA A 1157 / R. Lafolie]

ORNL \$561,870.00 \$561,870.00

This task is on stand by.

LANL from September 13 to 22, 2005, to receive clean room training. Rob Steiner and Wes Efurd (LANL) will visit Seibersdorf Analytical Laboratory in FY 2006. This will not change the scope or cost of the training. Stephan Vogt's two days of refresher training on March 14 and 15 at LANL was cancelled due to snow and will not be rescheduled.

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TaskID A.241	Subtask	Title Development of Integrated Review [USA A 1238 / C. Liguori]	[Agency# / Task Officer] Software for UMS	Organization Total	Budget	Total Spent Comments
			LANL	\$402,000.00	\$340,268.0	LANL Integrated Review Software - Minor updates to the foundational component libraries have been made to expand the flexibility of the new IRS design and architecture. The updated component libraries include Facility Manager, Import Manager, and the generic import/analysis COM interface specifications. The interface specification documents for the new IRS components were updated to reflect the added, or modified, capability of the software. Suggestions for the updates and modifications to the software were received from the IAEA in February and May of 2005. Updates or change requests that impacted the new IRS software elements were documented and tracked via processes defined by the UNARM Software Control Board. Modified and/or updated software will be delivered to the IAEA in the Baseline 2 Rev 0 UNARM product, scheduled for release on September 1, 2005.
	A.241.01		LANL	\$168,870.00	\$46,559.0	Adoption of OPD Data into Generic Software - The Operator Declarations Conversion and Review (ODCAR) software requirements document has been reviewed and only a few points remain to be addressed. A change of scope may be requested to modify the types of electronic files from which declarations will be converted. The ODCAR software design document has been written and is awaiting approval of the requirements document to go out for review. Some urgent tasks related to the Rokkasho NDAR work stemming from projects A.247.16 and E.122.10 have produced a resource conflict which impacts this project. The IAEA has been informed. It is likely that a change in schedule for A.241.01 will be sought, pending IAEA approval.
	A.241.02		LANL	\$123,000.00	\$6,300.0	O0 Prototype Analysis Module - The Interface documentation for analysis COM has been written and sent to the IAEA for review.
	A.241.03		LANL	\$27,000.00	\$3,800.0	
	A.241.04		LANL	\$74,000.00	\$3,700.0	IRS Upper Layer Redesign, Standardization - There has been no activity reported for this quarter.

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			[Agency# / Task Officer]	Organization	Total Budget	To	otal Spent	Comments
A.242		Evaluation of Miniature GRAND Elect	tronic Unit					
		[USA A 1239 / Y. Lee]				_		
	A.242.02		LANL	\$220,000.00	\$206,889.0			
						MiniGRAND Commercialization - this quarter.	There has be	een no activity reported for
	A.242.06		LANL	\$630,000.00	\$608,830.00	0		

MiniGRAND Microprocessor Board (MPB) Upgrade - A prototype unit which runs MiniGRAND firmware was provided to the IAEA. The expert Jim Halbig worked on several prototype hardware issues in April. A FAT file system was ported to the new MPB. This system will be used to provide large, up to one GB, on-instrument storage for stand alone installations and UNARM installations of up to three months, and possibly more. LANL worked to provide error detection and correction for the memory. LANL's Technology Transfer group worked to commercialize the Component Board for the MPB and ACD, which carries the common processor and other subsystems.

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Title

Tl-ID	Title	l- Of	0	Tradal Desilent	T-4-1 C4	Comments
TaskID A.247		Development of the SG System rocessing Plant	Organization n at	Total Budget	Total Spent	Comments
	A.247.05		LANL	\$814,000.00	1	RRP Integration of Inspection Equipment - LANL continued to work on the preliminary calibration and setup of the Vitrified Waste Canister Assay System (VCAS), in preparation for the shipment of the detector to Japan in August 2005. The supporting documentation is being produced. This work and a visit to RRP to install the detector will finish the original scope and funding for this task. The SSTS approved additional funding at its May 18, 2005, meeting for the provision of ion chamber monitors in the VCAS area and the implementation of the Temporary Canister Verification System data acquisition system.
	A.247.07		LANL	\$54,000.00	,	RRP Monitoring of Shielded MOX Canisters - LANL has stated that work under this task is complete. A paper describing the main points of the work performed under this task was presented at the ESARDA conference in London in May 2005 (LA-UR-05-3152). ISPO needs to obtain concurrence from the IAEA prior to project closeout.
	A.247.09		LANL	\$176,000.00	1 ! ;	RRP Project Coordination - The SSTS approved additional funding for this task at its April 7, 2005, meeting. Martyn Swinhoe (LANL) continues to report to the IAEA on all work done for the Rokkasho Reprocessing Plant by LANL. Work to be done on the Temporary Canister Verification System and the provision of inspector training has been coordinated between JNFL, the IAEA, and NMCC.
	A.247.13		IAEA	\$752,709.00		RRP Integrated Inspector Information System (I3S) - All deliverables for this task have been accepted by the IAEA.
	A.247.16		LANL	\$44,000.00	\$42,600.00	, ,
	A.247.17		ВМІ	\$46,105.00	\$28,519.00 !	

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		Title				
TaskID	Subtasl A.247.18	k [Agency# / Task Officer]	Organization LANL	Total Budget \$191,000.00	Total Spent \$56,783.00	
						Stand-Alone Integrated Review Software (IRS) and Training - This Subtaskk was approved at the May 2005 SSTS meeting. LANL was funded in December to work with the IAEA to study the requirements for a Stand-Alone IRS, which the IAEA can use as a backup system for the I3S/NDAR software and as an interim solution until the I3S/NDAR is complete. The IAEA and LANL agreed to use the individual review tools including Radiation Review, INCC, and ISO, rather than the "Integrated Review" which would require more effort to set up but give the inspectors a higher degree of information review. LANL provided a proposal to train IAEA inspectors in the use and operation of the Stand-Alone IRS system. The tentative date for the course is September 2005.
	A.247.19		LANL	\$511,500.00		UNARM Tool COM Support for NDAR - The SSTS approved funding for this task at the May 2005 SSTS meeting. The SSTS approved a change of scope of task A.247.19 via phone poll. The IAEA revised its timetable for accomplishing the software development and intends to have LANL focus on task A.247.19 first and put task E.122.14 on stand
A.248		Gate Monitor at LWRs Loaded with M	OX Assemblies			nave LAINE locus on task A.247.19 liist and put task E.122.14 on stand
		[JNT USA A 1356 / T. Pochet]				
			LANL	\$330,000.00	\$279,630.00	
						There has been no activity reported for this quarter.
A.250		Enhanced ANM Capability for HKED S [USA A 1369 / N. Doubek]	Software at SAL			
	A.250.01		LANL	\$165,000.00	\$166,055.00	
						There has been no activity reported for this quarter.
A.251		Expert - Instrumentation Systems [USA E 1372 / M. Aparo]				
			CFE	\$550,000.00	\$411,378.00	
						The expert James Halbig and a team traveled to Chernobyl to install monitoring systems at Units 1, 2, and 3. Modifications to cables and equipment at access points were made according to feedback from the facility. Parts for the installation were ordered. LANL reported that detectors were tested and are well suited to the installed hardware. A

monitoring systems at Units 1, 2, and 3. Modifications to cables and equipment at access points were made according to feedback from the facility. Parts for the installation were ordered. LANL reported that detectors were tested and are well suited to the installed hardware. A test detector system was installed at the IAEA and data is being retrieved and reviewed. Dr. Halbig began building a prototype ACD Board for testing the implementation that will be used in Rokkasho. Requests for contract manufacture of the motherboard have been prepared and are waiting for LANL commercialization of the component processor board, which is to be used on both the new Master Processor Board (MPB) and the ACD. Dr. Halbig continues to review state-of-health information from the BN-350 Reactor unattended monitoring system. The process to finalize the upgrade of the modified Zwilag Detector has begun.

	Title			
TaskID A.252	Subtask [Agency# / Task Officer] Field Support and Implementation [USA A 931 / R. Carchon]	Organization	Total Budget	Total Spent Comments
	A.252.08	BNL/NCT	\$59,311.55	\$58,933.00 Downblending at Ulba - The Ulba fuel fabrication facility in Kazakhstan began its campaign to downblend HEU from unirradiated BN-350 fuel stored previously at the Ulba facility. The IAEA requested resumption of the advice and assistance from Jim Lemley (BNL), which had been initiated in March 2003. Early assistance was requested before large quantities of the HEU were processed. Dr. Lemley arrived in Vienna on June 14 to consult with the IAEA, in preparation for a visit to Kazakhstan with the IAEA from June 18 to 24, 2005.
	A.252.09	ORNL	\$7,821.00	\$7,821.00
	A.252.10	BNL/NCT	\$68,744.00	IQ3 Detector - There has been no activity reported for this quarter. \$68,612.00 Neutron Camera - There has been no activity reported for this quarter.
	A.252.10	INL	\$24,008.00	\$24,570.00
	A.252.10	LLNL	\$81,000.00	\$75,068.00 Gamma Camera - The report has been sent to the IAEA for review and
	A.252.12	КСР	\$568,625.00	comment and is being finalized. \$0.00 T-1 Seals - KCP shipped the first batch of fifty seals to the IAEA on April 15, 2005. KCP sent a second shipment of fifty seals in May. The IAEA will visit the Savannah River Site in August and will verify the receipt of the seals. This Subtaskk can be closed upon confirmation of
	A.252.14	LANL	\$146,000.00	\$106,679.00 FDMS and RR Codes - Joe Longo worked on small bug fixes, in preparation for the formal release of FDMS with UNARM Baseline 2. Joe Longo and Shirley Klosterbuer are working on the September 1, 2005, release.
	A.252.15	LANL	\$48,000.00	\$46,500.00 Upgrade VWCC at Tokai - There has been no activity reported for this quarter. The final report is in progress.
	A.252.16	LANL	\$41,000.00	\$34,500.00 Recalibration of the Hulls Measurement and Monitoring System (HMMS) - The final report is in progress.
	A.252.18	LANL	\$28,000.00	\$28,000.00 Unattended Uranium Enrichment Monitor -The SSTS approved this Subtaskk at its May 18, 2005, meeting. Don Close was scheduled to meet with Bernard Wishard to discuss the development of an unattended uranium enrichment monitor.

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	Title				
TaskID	Subtask [Agency# / Task Officer]	Organization	Total Budget	Total Spent	Comments
A.253	Expert - Specifications of Data Collection and Evaluation Software for RRP (P4) [USA A 1398 / S. Johnson]	d			
		CFE	\$410,477.00	\$369,112.0	0
					The expert Joseph Damico has been monitoring the contract with Cap Gemini Ernst & Young (CGE&Y) for the development phase of the Integrated Inspector Information System (I3S) Software, which was signed on April 1, 2005. Many enhancements have been delivered, and others are pending. The first formal release of the I3S was installed at RRP during April, including ASAS, GARS, and an early release of Solution Monitoring Measurement System (SMSS). The system processed more than 2.5 million files in the first two weeks of operation. The installation and related testing revealed problems with several software components, which have been reported to the contractors and fixes are underway. Work continues to configure the I3S for optimal performance. Inspectors are using the I3S for the limited inspection activities during the uranium testing phase at RRP. The I3S at RRP enables inspectors and others to access the system graphical user interface (GUI) from their desks in Vienna and to browse the raw data files over the SG LAN. The Network Security Audit for the I3S was conducted during May and June. The contractor visited IAEA headquarters in late May to perform preliminary work and to plan the audit work at RRP. The contractor,
					SGIT staff, and SGOA inspectors performed the audit at RRP during the week of June 6. The NDA Review (NDAR) design effort is nearly complete. Procurement for the various NDAR components including the LANL Nuclear Code will start in August. A contract for the I3S Surveillance Review Subsystem (SURS) was placed with Aquila Technologies, which will last for approximately six months. SURS will be installed at RRP after it is tested in Vienna. Mr. Damico coauthored papers on the I3S and SURS for the 46th INMM conference.
A.256	Evaluation Software for HKED Spectral Analythe Joint IAEA/JSGO On Site Analytical Labothe Rokkasho Reprocessing Plant				

LANL \$160,000.00 \$160,147.00 There has been no activity reported for this quarter.

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[USA A 1420 / G. Duhamel]

	Title				
TaskID	Subtask [Agency# / Task Officer]	Organization	Total Budget	Total Spent	Comments
A.257	Consultant - Chemical Separation Techr Environmental Samples [USA A 1432 / Y. Kuno]	niques for			
		Clemson	\$298,000.00	\$203,199.00	
				i ; ; ;	This task will improve certain radiochemistry separation methods, used in the analysis of radionuclides in safeguard samples at the IAEA Safeguard Analytical Laboratory (SAL). Task 1 involves an improved procedure to reduce impurities in separated environmental samples, to allow good recovery at the 10 picogram of plutonium-244 spiking level, to lower the detection limit of the thermal ionization mass spectrometer. Task 2 involves the development of an additional separation step in the normal procedure for uranium and plutonium analysis, to measure americium in environmental samples at the sub-picogram level. Task 3 involves the development of a method to separate and determine small traces of uranium found in purified plutonium samples, as a means of "fingerprinting" materials under safeguards. This work is being performed at SAL by James Navratil and Amanda Padgett. A final draft report is due to SAL for review by November 30, 2005.
		IAEA	\$71,300.00	\$68,404.00	
				(This funding is provided for travel expenses for Dr. James Navratil (Clemson University) and Amanda Padgett (Clemson University graduate student).
A.258	Detection System for In Situ Measureme Signatures from Spent Fuel Storage Co				
	[USA A 1434 / Y. Lee]				
	•	LANL	\$180,000.00	\$91,342.00	
				ı	This task had a recent scope change because the original SP-1 measurement method was determined to be impractical. High-energy petitron imaging of the dry storage cask contents has been determined

measurement method was determined to be impractical. High-energy neutron imaging of the dry storage cask contents has been determined to be the measurement method of choice. On June 30, 2005, a meeting between LANL and the IAEA resulted in a change in task scope to eliminate the construction of the original thermal neutron counter and, instead, to perform laboratory testing of the high-energy neutron imaging principle and field testing of the technique at INEEL, and to develop an engineering design of a measurement system. Assuming a positive outcome of the proof-of-principle field tests, the IAEA plans to submit a follow-on SP-1 request for the construction and delivery of a field-usable detector system. The scope change does not require additional funding. ISPO will obtain SSTS concurrence on this scope change.

TLID	Title	0	T-4-1 D14	T-4-1 C4	Community
TaskID A.259	Subtask [Agency# / Task Officer] Expert - Development of New Seals [USA E 1452 / M. Zendel]	Organization	Total Budget	Total Spent	Comments
		CFE	\$402,900.00	\$282,596.0	0
					The expert Hal Undem is overseeing the VOID-3 Seals Design Contract (SDC) with Avery Dennison. The SDC will examine new adhesive seal application issues, such as the use of adhesive seals on nuclear material canisters for short periods of time during intrafacility transit. LANL was selected as the vulnerability assessment (VA) team and will examine the developing VOID-3 design (see Task E.145), based on a baseline VA of the VOID-2 and VAs of Avery Dennison produced prototypes. Under the metal seal signature studies, there are difficulties in incorporating radio frequency identifiers (RFIDs) as a potential metal seal signature element, which might augment or replace the current signature. Although the Joint Research Center at Ispra has demonstrated the ability to read RFIDs from inside metal cup seals, the read reliability appears to be very low.
A.262	Coordinated Experts' Meeting on Noble Gas Monitoring and Sampling [JNT USA A 1494 / J. Whichello]	S			
		BNL	\$25,000.00	\$23,694.0	0
					The SSTS approved on June 28, 2005, Robert Bari's attendance at the Coordinated Experts' Meeting on Noble Gas Monitoring and Sampling. Dr. Bari will make a presentation to the IAEA at this meeting, scheduled from September 12 to 16, 2005
		PNNL	\$71,000.00	\$58,951.2	9
					The SSTS approved funding by phone poll in June for US experts to participate in the September 12 to 16, 2005, technical meeting to address the use of noble gas monitoring as a tool for detecting undeclared reprocessing activities or for other safeguards applications. Ted Bowyer and Ned Wogman (PNNL), Robert Bari (BNL), and Dan Fortney (DOD) may participate. Dr. Bari has submitted an abstract for the meeting.
A.263	Traceability of DA Measurements - Provision Certified Reference Materials [USA A 1496 / S. Balsley]	on of NBL			
	[OSA A 1430 / S. Daisiey]	NBL	\$103,000.00	\$32,625.0	0
			4 .33,333.00	432,320.0	There has been no activity reported for this quarter.

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its April 2005 meeting for Task A.265.01. Preparations for the ORIGEN/SCALE training at the IAEA on September 14 to 16 are underway. Class participants and alternates have been identified. Steve Bowman and Ian Gauld (ORNL) are customizing the training to focus on Safeguards applications and outputs. B.080 Training Workshop in Design Information Review for the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez] BNL/SAC \$305,000.00 \$244,748.00 This task is on stand by. ORNL \$0.00 \$0.00		Title				
Peter Mason participated in the IAEA's Consultants' Group Meeting or Nuclear and Environmental Reference Materials for IAEA Sardeguards Verification Measurements by Destructive Analysis, from May 23 to 26 in Vienna. The purpose of the meeting was to assemble an international group representing the IAEA and nuclear reference material (IRM) producers to discuss current programs of production on NRMs, to identify problems, and to make recommendations for future activities which involve the IAEA in the Measurement Evaluation (ME) A.265 Environmental Sampling Evaluation Support [USA A 1498 / W. Fuhr] ORNL \$209,000.00 \$169,824.00 Diane Fischer provided environmental sampling (ES) evaluation support for three weeks in June. Ms. Fischer completed seven high priority E5 evaluation reports and a review of the E5 Sardeguards Technical Repo evaluation reports and a review of the E5 Sardeguards Technical Repo evaluation reports and a review of the E5 Sardeguards Technical Repo evaluation reports and a review of the E5 Sardeguards Technical Repo evaluation chapter. She participated in a quality control discussion, organized a tutorial on the MStair code, and created a template with instructions for a data visualization tool for E5 data. A.265.01 ORNL \$32,000.00 ORIGENISCALE Software and Training - The SSTS approved funding its April 2005 meeting for Task A.265.01. Preparations for the ORIGENISCALE training at the IAEA on September 14 to 16 are underway. Class participants and alternates have been identified. Sleve Bowman and Ian Gauld (ORNL) are customizing the training to focus on Safeguards applications and outputs. B.080 Training Workshop in Design Information Review for the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez] BNL/SAC S305,000.00 \$244,748.00 This task is on stand by.		Analytical Quality Control - Participation of SME Programme	0	Total Budget	Total Spent	Comments
Nuclear and Environmental Reference Materials for IAEA Safeguards Verification Measurements by Destructive Analysis, from May 23 to 26 in Vienna. The purpose of the meeting was to assemble an international group representing the IAEA and nuclear reference material (NRM) producers to discuss current programs of production on NRMs, to identify problems, and to make recommendations for future activities which involve the IAEA in the Measurement Evaluation (ME) A.265 Environmental Sampling Evaluation Support [USA A 1498 / W. Fuhr] ORNL \$209,000.00 \$169,824.00 Diane Fischer provided environmental sampling (ES) evaluation support for three weeks in June. Ms. Fischer completed seven high priority E5 evaluation reports and a review of the ES Safeguards Technical Repovenduation chapter. She participated in a quality control discussion, organized a tutorial on the MStar code, and created a template with instructions for a data visualization tool for ES data. A.265.01 ORIGEN/SCALE Software and Training - The SSTS approved funding its April 2005 meeting for Task A.265.01. Preparations for the ORIGEN/SCALE training at the IAEA on September 14 to 16 are underway. Class participants and alternates have been identified. Steve Bowman and Ian Gauld (ORNL) are customizing the training to focus on Safeguards applications and outputs. B.080 Training Workshop in Design Information Review for the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodríguez] BNI/SAC \$305,000.00 \$244,748.00 This task is on stand by.			NBL	\$25,000.00	\$700.00	
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ORIGEN/SCALE Software and Training - The SSTS approved funding its April 2005 meeting for Task A.265.01. Preparations for the ORIGEN/SCALE training at the IAEA on September 14 to 16 are underway. Class participants and alternates have been identified. Steve Bowman and Ian Gauld (ORNL) are customizing the training to focus on Safeguards applications and outputs. B.080 Training Workshop in Design Information Review for the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez] BNL/SAC \$305,000.00 \$244,748.00 This task is on stand by. ORNL \$0.00 \$0.00			32	\$255 ,000000	Di fo ev ev or	r three weeks in June. Ms. Fischer completed seven high priority ES valuation reports and a review of the ES Safeguards Technical Report valuation chapter. She participated in a quality control discussion, ganized a tutorial on the MStar code, and created a template with
its April 2005 meeting for Task A.265.01. Preparations for the ORIGEN/SCALE training at the IAEA on September 14 to 16 are underway. Class participants and alternates have been identified. Steve Bowman and Ian Gauld (ORNL) are customizing the training to focus on Safeguards applications and outputs. B.080 Training Workshop in Design Information Review for the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez] BNL/SAC \$305,000.00 \$244,748.00 This task is on stand by. ORNL \$0.00 \$0.00		A.265.01	ORNL	\$32,000.00	\$32,000.00	
the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez] BNL/SAC \$305,000.00 \$244,748.00 This task is on stand by. ORNL \$0.00 \$0.00					it O ur Si	RIGEN/SCALE training at the IAEA on September 14 to 16 are nderway. Class participants and alternates have been identified. teve Bowman and Ian Gauld (ORNL) are customizing the training to
BNL/SAC \$305,000.00 \$244,748.00 This task is on stand by. ORNL \$0.00 \$0.00	B.080	the Entire Life Cycle of Research Reactors	eview for			
This task is on stand by. ORNL \$0.00 \$0.00		[USA B 984 / P. Rodriguez]	DNII /CAC	\$20E 000 00	¢244.749.00	
ORNL \$0.00 \$0.00			DINL/SAC	\$305,000.00	. ,	his task is an stand by
·			ORNL	\$0.00		ilo taon io on stand by.
I NIS TASK IS ON STAND DV.			OTATE	ψ3.00	•	nis task is on stand by.
B.080.01 ISPO \$76,062.00 \$90,200.00 This task is on stand by.		B.080.01	ISPO	\$76,062.00	\$90,200.00	,

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TaskID B.082	Title Subtask [Agency# / Task Officer] Safeguards Training Course: Enrichmen	Organization t Technology	Total Budget	Total Spent	Comments
	[USA B 1001 / M. Hunt]	ORNL	\$389,255.00	L J p b	DRNL delivered the tenth session of Nuclear Material Safeguards for Jranium Enrichment Plants training to sixteen IAEA inspectors from June 13 -17, 2005. Michael Whitaker, Joe Dooley, and Duane Starr presented the week long course. Instructional videos, training chart books, and the IAEA training manual on "Uranium Enrichment Plant Characteristics" were provided to the IAEA.
B.084	Revision of Introductory Course on Ager	ncy SG (ICAS)			
	[USA B 1106 / P. Rodriguez]			•	
		BNL/ENT	\$15,144.00	\$15,144.00	
		Sonalysts	\$644,000.00	w p S o v I jc s	Michael Stein (Sonalysts) visited the IAEA for one week. Mr. Stein worked directly with the Section for Safeguards Training (TTR) on the project to upgrade ICAS. He participated in meetings with the TTR Section Head and the ICAS Training Officer, to understand their views of the modernizations and improvements needed to upgrade the current version of the course. Mr. Stein interviewed Operations Division Section Heads, Unit Heads, and graduates of ICAS 50, to obtain input on the obsperformance of ICAS graduates. He reviewed the curricula and selected training materials for the 50th and the 52nd ICAS. Mr. Stein submitted a report with recommendations for upgrading ICAS.
B.090	Workshop on Quality Assurance Technic [JNT USA B 1277 / D. Neal]				
		SAM	\$150,000.00	\$69,147.00	
	B.090.01	SAM	\$84,000.00	\$162,426.00 T	here has been no activity reported for this quarter.

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		Title				
	Subtask	_	Agency# / Task Officer]	Organization Total	d Budget	Total Spent Comments
B.091		Training on Remote Monitoring and Unat Monitoring	tended			
		[USA B 1337 / P. Hypes]				
	B.091.03		LANL	\$138,500.00	\$91,100.00	
						Radiation Review Software Training - Please see: Task B.093.03, Contractor: Sonalysts.
	B.091.03		Sonalysts	\$118,500.00	\$92,451.00	
						Colin Carroll (Sonalysts) worked with John Determan and Kelly Michele (LANL) to present the MIC/Radiation Review pilot course to a group of twelve Agency inspectors. The pilot course included classroom instruction, practical training, performance tests, and a written examination. The goal of the pilot course is to provide Agency inspectors with the knowledge and skill required to perform MIC and Radiation Review software tasks, which they would be expected to perform in their jobs.
B.093		IAEA Participation in U.S. Sponsored Tra	ining			
		Courses				
	B.093.05	[USA B 0086 / P. Hypes]	LANL	\$495,286.00	\$488,600.00	1
	2.000.00		27.1112	Ψ-100,200.00	. ,	Advanced Plutonium Verification Techniques - Preparations were made for the June presentation of the course.
	B.093.06		LANL	\$865,748.00	\$708,543.00)
						There was no activity scheduled for this quarter. LANL will conduct an NDA course for new IAEA inspectors from August 15 to 26, 2005.
	B.093.07		BNL	\$12,000.00	\$0.00)
	B.093.07		LANL	\$74,000.00	\$73,100.00) This task is in stand by.
	B.093.07		SRNL	\$47,000.00	\$45,065.00	•
						This task is in stand by.
B.094		Neutron Pulse Simulator for Training and [USA B 1401 / A. Lebrun]	Testing			
			LANL	\$529,300.00	\$427,701.00	
						The Neutron Pulse Simulator (NPS) project is nearing completion. Eight units have been assembled, tested, and shipped to the IAEA. The User Manual is complete. Training material is being assembled.

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	Title				
TaskID B.096	Subtask [Agency# / Task Officer] Workshop on Additional Protocol Activities [USA B 1415 / M. Hunt]	Organization	Total Budget	Total Spent	Comments
		BNL/NCT	\$320,679.00	\$51,106.00	
					BNL submitted a revised project plan and cost proposal for this effort. The documents are being reviewed by ISPO and will be presented to the SSTS at its September 1, 2005, meeting.
B.098	Enhanced Observational Skills [USA B 1446 / M. Hunt]				
	[OOA B 14407 M. Hulle]	Sonalysts	\$286,000.00	\$224,537.00	
		, ,			An additional implementation of the initial training course on Enhanced Observational Skills was added to Sonalysts' contract with BNL. The course was conducted during the week of May 2, 2005. It was attended by eleven experienced safeguards inspectors. Two implementations of refresher training are expected to be completed in CY 2005. The Agency requested that an additional implementation of the initial training course be conducted in October, as part of the ICAS course that was added recently to the training schedule.
B.099	Physical Inventory Taking Computer Based	Training			
	[USA B 1464 / V. Cisar]	BMI	\$175,000.00	\$164,055.00	
		DIVII	\$175,000.00	•	There has been no activity reported for this quarter.
B.101	Expert - Senior Instrumentation Specialist - T NDA Equipment and Procedures [USA B 1418 / A. Hamilton]	Training in			There has been no dearny reported for alle quarter.
		IAEA	\$230,000.00	\$51,266.00	
					The expert Philip Hypes is expected to begin his CFE assignment on July 1, 2005.
C.102	Development of Safeguards for Final Dispos Spent Fuel in Geological Repositories - SAG II				
	[JNT USA C 1204 / M. Diaz-Menendez]				
		ISPO	\$5,389.00		There was no SAGOR activity for this quarter. There is no activity expected for the rest of the calendar year. The IAEA plans to make a formal request for the next phase of this work. This task will be
			A= 2 222 5 =		considered complete when that request is received.
		LANL	\$58,600.00	\$58,600.00	
		SNL	\$17,947.32	\$17,947.32	There was no activity for this quarter.
		3.12	ψ,σ		There was no activity for this quarter.

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TaskID C.105	Title Subtask [Agency# / Task Officer] Expert - Development of the Safeguards Rokkasho Reprocessing Plant (Ehinger) [USA C 1257 / S. Johnson]	Organization System for	Total Budget	Total Spent	Comments
		CFE	\$934,500.00	\$778,043.00	
				The SSTS through Ju support the (RRP) con being colle maintenan number of Testing of data contir during inte System (I3 been recei data from t staff to star	approved the extension of Michael Ehinger's CFE contract ly 2006 at its April 7, 2005 meeting. Mr. Ehinger continued to a IAEA's JNFL Project. The Rokkasho Reprocessing Plant tinues uranium commissioning. Solution monitoring data is acted at the facility. Mr. Ehinger has been involved with ce and troubleshooting equipment, which has resulted in a procedures and instructions for inspectors in the field. the Solution Monitoring Software (SMS) for processing the nues. Mr. Ehinger helped identify and resolve bugs detected gration with the overall Integrated Inspector Information as). A preliminary release of the SMS from the JRC-Ispra has ved, which is configured for processing solution monitoring the Tokai Reprocessing Plant. Mr. Ehinger is working with the to parameterize the evaluation routines. The basic concept tware is similar to the SMS for the RRP.
C.106	Expansion of the Physical Model [USA C 1279 / Z. Liu]				
	•	BNLCONTR	\$28,000.00	\$15,706.00	
				There has	been no activity reported for this quarter.
		INEEL	\$11,900.00	\$11,379.00	·
				There has	been no activity reported for this quarter.
		ISPO	\$11,000.00	\$13,423.00	
				There has	been no activity reported for this quarter.
		LLNL	\$12,000.00	\$10,930.32	
				There has	been no activity reported for this quarter.
		ORNL	\$140,745.00	\$140,745.00	
				There has	been no activity reported for this quarter.

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	Title			
TaskID C.110	Subtask [Agency# / Task Officer] Development and Test of an Integrated Sa Scheme for Transfers to Dry Storage at CA Reactors [JNT USA C 1388 / J. Doo]		Total Budget	Total Spent Comments
		LANL	\$9,300.00	\$9,300.00 Jon Sanborn (State Department) participated in field trials of an integrated safeguards approach for the CANDU facilities at the Wolsong Nuclear Power Station (Republic of Korea) in April. The purpose of the visit was to identify integrated safeguards methods to reduce the IAEA inspector effort during spent fuel transfers from the reactor facility to dry cask storage. Dr. Sanborn is preparing a final report for the IAEA.
C.111	Safeguards System for Chernobyl Unit 4 [JNT USA E 1445 / O. Zatsepin]	State Dept.	\$0.00	\$0.00
	[BNL/NCT	\$281,000.00	\$228,878.00 Brian Boyer (BNL) traveled with Colin Carroll (Sonalysts) to Vienna in mid March to meet with the IAEA's Department of Technical Cooperation (TC) staff. They discussed TC's radioactive waste disposal task at Chernobyl Unit 4 and the safeguarding of nuclear material, which may be discovered in the high level waste during the construction of the New Safe Confinement.
		Sonalysts	\$246,000.00	\$124,275.00 The Agency, Sonalysts, and BNL prepared for a site visit to Chernobyl NPP. The goals of the site visit are to plan for the installation of the MMCT and Shelter Monitoring systems and to determine radiation measurement instruments, which ChNPP could use to characterize material unearthed during the New Safe Confinement foundation excavation. ChNPP will brief the Agency and the US Team on the status of restarting construction of the Conditioning and Dry Storage Facility. The site visit to Chernobyl is planned for the week of August 8,
	C.111.01	LANL	\$60,900.00	\$41,100.00 Instrumentation Assistance to Shelter Project - There was no activity this quarter. Kiril lanakiev's support to the IAEA in the construction of a multi-channel analyzer for a NaI spectroscopy design in support of safeguards at Chernobyl Unit 4 has been postponed.
	C.111.02	LANL	\$50,000.00	\$24,300.00
	C.111.03	IAEA	\$23,000.00	\$0.00

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	Title				
TaskID	Subtask [Agency# / Task Officer]	Organization	Total Budget	Total Spent	Comments
C.112	Consultant - Development Support for Integ Safeguards	rated			
	[USA C 1451 / D. Hurt]				
		IAEA	\$60,000.00	\$46,937.00	
	C.112.01	ISPO	\$57,000.00	\$43,616.00	
				1 1 1 2 3 4 4 5	The consultant James Larrimore visited ISPO at BNL on May 5. He discussed his work with ISPO, met with contracts representatives, and made a presentation on Integrated Safeguards to the Nonproliferation and National Security Discussion Group. Mr. Larrimore consulted at the AEA from May 17 through June 10. He assisted the IAEA in the mplementation of short-notice random inspections (SNRI) at natural and low-enriched uranium conversion and fuel fabrication plants. A document was drafted to serve as a model for developing safeguards approaches for SNRIs under traditional and under integrated safeguards, and for planning and implementing of SNRIs at those acilities. Mr. Larrimore provided assistance in the criteria and guidelines for safeguards on nuclear material in retained waste, based on work performed in 1996 when he chaired the Criteria Working Group.
	C.112.02	BNL/NCT	\$16,000.00	\$0.00	
	C.112.02	BNLCONTR	\$78,500.00	\$0.00	

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TaskID C.113	Title Subtask [Agency# / Task Officer] Development of Techniques to Estimate the Separative Capacity of R&D Isotopes [USA C 1476 / W. Bush]	Organization	Total Budget	Total Spent Comments
		BNL/NCT	\$25,000.00	\$15,078.00 Brian Boyer and David Gordon assembled information on gaseous diffusion plant operations. They provided LLNL with a chapter on the possibilities and probabilities of a gaseous diffusion enrichment pilot plant or R&D facility being used to create undeclared significant quantities of highly enriched uranium.
		LANL	\$40,000.00	\$21,400.00 John Lyman participated in the March 2 conference call set up by Mona Dreicer (LLNL). The participants are writing several sections for a report, which analyzes the uranium isotope separative capacity for methods that can be used for enrichment. The participants discussed their progress and planned for a meeting in the late summer to discuss the final document. LANL is responsible for preparing two sections of the report. The first analyzes the SILEX technology, which is a molecular laser isotope separation method for enriching uranium. The second analyzes the more general molecular laser isotope separation (MLIS) methods. The first report: "Enrichment Separative Capacity for SILEX" (LA-UR-05-3786) is complete.
		LLNL	\$55,000.00	\$34,779.00 As the coordinator of the preparation of a report on enrichment techniques, LLNL has received four of the seven sections needed for the first draft of the report.
		ORNL	\$40,785.00	\$9,096.00 Duane Starr and Len Phillips (ORNL) are preparing sections on calutrons, centrifuges, and the plasma separation process for the report. Participants are expected to meet next quarter to discuss and evaluate the drafted sections.
C.114	Develop a PBMR Operational Model to Identi Quantify Proliferation Indicators and Possibl Diversion Scenarios [USA C 1547 / Y. Touil]			
		INL	\$40,000.00	\$0.00 The SSTS approved this task at its May 18, 2005, meeting. INL will evaluate the strategic value of fully-burnt-up PBMR fuel. The results of this task will determine the need for additional work on PBMRs.
C.115	Quality Management Specialist [USA C 1555 / J. Patten]	IAEA	\$171,042.00	\$0.00

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TaskID C.116	Subtask	Title [Agency# / Task Officer] Determination of Decommissioned Status	Organization of Facilities	Total Budget	Total Spent	Comments
		[USA C 1561 / Y. Touil]	BNL/NCT	\$130,000.00	\$0.00	
D.122		Systems Engineering Process for SGIT [USA D 1158 / G. Cherif]				
	D.122.01		CGE&Y	\$251,000.00		A modification of the roadmap that could lead eventually to a change request was discussed, following an awareness session with SGIT. The modification would be able to be performed within the existing budget. CGE&Y will suggest a changed framework and seek the steering committee's approval.
	D.122.02		BIT	\$70,000.00	\$29,623.00) There has been no activity reported for this quarter.
	D.122.03		IAEA	\$70,000.00	\$0.00	, ,
D.136		Expert - Divisional Information Security Po - Terrence Dunn [USA D 1335 / J. Baute]	licy Officer			
			CFE	\$775,200.00	\$615,324.00) The expert Terrence Dunn advised the Safeguard Departmental

The expert Terrence Dunn advised the Safeguard Departmental Information Security Office (SH-SPR) on the continuing development and implementation of improved information security policies. Mr. Dunn examined several reported problems and deficiencies related to information and physical security. He proposed/implemented solutions. Mr. Dunn served as departmental representative to the Agency-wide Information Security Policy Steering Group (ISPSG). He notified the ISPSG and senior managers of matters requiring policy attention. Mr. Dunn participated in the Department's planning for business continuity and disaster recovery. He assumed a security advisory role in the ISIS Re-engineering Project.

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	Title				
TaskID D.137	Subtask [Agency# / Task Officer] Consultants - Assistance on Information Coand Information Systems	Organization ollection	Total Budget	Total Spent	Comments
	[USA D 1126 / V. Braguine] D.137.01	BNL	\$16,000.00	\$0.00	
	D.137.01	ISPO	\$73,840.00	\$48,023.00	
			* -/-	Alle	en Locke - There has been no activity reported for this quarter. Mr. ke is scheduled to consult in November 2005.
	D.137.03	LANL	\$103,000.00	\$82,200.00	
	D.137.04	LANL	\$235,000.00	Jeff \$168,308.00	Bedell - There has been no activity reported for this quarter.
	D.137.04	LANL	φ233,000.00	Arvi the ope wer	id Lundy - Dr. Lundy consulted with SGIT for two weeks in March on methodology and use of scientific literature as part of the IAEA's en-source collection and country evaluations. Primary interactions with SGIT/IIS and SGOB. John Lyman assisted Dr. Lundy, by ewing several papers on laser-based enrichment technologies.
	D.137.06	PNNL	\$180,000.00	\$161,682.91	
				Wo	d Wogman - There has been no activity reported for this quarter. Mr. gman's next scheduled trip to Vienna is from August 15 to August 2005.
	D.137.07	SNL	\$146,756.90	\$113,141.28	
				Ms. has	ce van Berkel - There has been no activity reported for this quarter. van Berkel will provide six weeks of support to SGIT in 2005. She been in contact with the IAEA and has established tentative dates support, beginning in August 2005.
	D.137.08	LLNL	\$161,000.00	\$79,470.85	
				Dr. SST Sul	orge Anzelon - There has been no activity reported for this quarter. Anzelon is planning tentatively to consult in September 2005. The FS has approved the redirection of some funding from this Subtaskk to btaskk D.137.16, to cover travel costs for Cyndee Annese (LLNL) to sult for two weeks in July 2005.
	D.137.09	LLNL	\$117,862.00	\$83,209.33	
					iam Domke - There has been no activity reported for this quarter. Dr. mke plans tentatively to consult in the fall.
	D.137.11	LLNL	\$72,982.27	\$72,317.93	
				He	ger Miller - Mr. Miller consulted for two weeks from April 4 to 15, 2005. produced four reports and provided other ad hoc assistance. Mr. er is scheduled to consult in October 2005.
	D.137.12	LANL	\$57,000.00	\$30,355.00	
					hard Wallace - Mr. Wallace's first consulting assignment is planned July.

	Title					
TaskID	Subtask [Agency# / Task Officer] D.137.13	Organization LLNL	Total Budget \$29,500.00	Total Spent Comments \$29,969.00	Comments	
				Doug Vogt - Mr. Vogt consulted for two weeks from May 16 to 27, He produced two reports and provided other assistance.		0 27, 2005.
	D.137.14	LLNL	\$29,500.00	\$16,374.00		
				Jim Hassberger - Mr. Hassberger consulted for two weeks from M June 10, 2005.		om May 30 to
	D.137.15	LLNL	\$0.00	\$0.00		
				Lisa Owens Davis - The SSTS recommended adding Ms. Davis to team of LLNL consultants under this task. Her consultation has no been scheduled.	am of LLNL consultants under this task. Her consultation	
	D.137.16	LLNL	\$0.00	\$0.00		
				Cyndee Annese - The SSTS approved the redirection of funding fr Subtaskk D.137.08 or D.137.09 to cover travel costs for a two-wee consulting visit by Ms. Annese. The visit was scheduled for July 2 but had to be postponed.	btaskk D.137.08 or D.137.09 to cover travel costs for a twnsulting visit by Ms. Annese. The visit was scheduled for	o-week
	D.137.17	LANL	\$20,000.00	\$0.00		
				Caroline Mason - There has been no activity reported for this quar	roline Mason - There has been no activity reported for this	quarter.
	D.137.18	ISPO	\$0.00	\$0.00		
				Jacob Blackford - The SSTS approved at its April 7, 2005, meeting assignment of Jacob Blackford to assist the IAEA with open sourc projects. Mr. Blackford will consult later this year.	signment of Jacob Blackford to assist the IAEA with open	
	D.137.19	ORNL	\$30,000.00	\$0.00		
				James David Snider - The SSTS approved funding for this consult at its May 18, 2005, meeting.		onsultancy
	D.137.20	ORNL	\$30,000.00	\$18,406.00		
				Leonard Phillips - The SSTS approved funding for this consultance its May 18, 2005, meeting.		ıltancy at
	D.137.21	PNNL	\$22,000.00	\$12,872.00		
				Winston Little - The SSTS approved funding for this consultant in	nston Little - The SSTS approved funding for this consulta	ınt in July.
	D.137.22	BNL	\$35,000.00	\$0.00		
D.138	Open Source Information Collection [USA D 1381 / J. Lepingwell]					
	D.138.03	IAEA	\$39,000.00	\$25,479.00		
				K2 Enterprise System - There has been no activity reported for thi quarter. Consultant Eduardo Fujii may not be available to continu work on this project.	arter. Consultant Eduardo Fujii may not be available to co	

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	Title				
TaskID D.141	Subtask [Agency# / Task Officer] Internship Program [USA D 1396 / A. Hamilton]	Organization	Total Budget	Total Spent	Comments
	D.141.04	BNL	\$803,634.00	Donoghue Knickerbo Kimberly Klump (SG (SGIT/ISH internship Extension have bee Arrangem	5 Internships - Indhira Ramirez (SG/SPR) and Kathleen e (SGIT/ISH) completed their internships in May 2005. Cherie ocker (SGOA/JNFL), Francesco Queirolo (SGTS/TNS), and van Dyke (SGIT) completed their internships in June. Kendra GIT/TNS), Maryam Tatavosian (SGIT/IIS), Andrew Janowczyk H), and Christopher Duncan (SG/SIAU) continue their is until August 2005. In - Jonathon Essner (SGIT) and Jessica Satterfield (SGIT/IIS) en extended in the internship program until September 2005. In ents were made for Jessica Satterfield to attend and present 105 INMM annual conference.
	D.141.04	BNL/OEP	\$85,000.00	\$258,814.00	
	D.141.05	IAEA	\$52,000.00		ultant Chris Dalton continued working on the Common

The consultant Chris Dalton continued working on the Common Inspection Onsite Software Package (CIOSP) Version 2. He identified several new things to be addressed in the main coding of CIOSP. Mr. Dalton redesigned the user interface related to the wizards, which lead inspectors through different processes in the Book Exam and Short Notice Random Inspection (SNRI) plugins. He fixed minor bugs in the Book Exam wizard. Mr. Dalton modified the task completion notification in the SNRI wizard. He reworked CIOSP's menu system. Version 2 will have a complete menu system which will be dynamic, so that every window will have the capability to add its own menu items as needed. Mr. Dalton created a new set of classes that allow plugins to add their own menu items. The CIOSP team achieved the goal of binary compatibility for CIOSP. Mr. Dalton helped the JNFL Project Office prepare for an internal QA audit. He reviewed the code for fifteen versions of the project and put them into SourceSafe, so that they can be pulled out and compiled on a project-by-project basis.

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		Title				
TaskID		k [Agency# / Task Officer]	Organization	Total Budget	Total Spent	Comments
	D.141.07	•	BNL/OEP	\$900,000.00	\$127,999.00	
						IAEA selections were completed for the 2005-2006 Internship Program in February 2005. Candidates were notified of their selection. The participants were confirmed by April. General orientation was held at BNL on May 16 for the 2005-2006 Internship Program. All but one intern attended. One JPO and one intern who is to be assigned to the IAEA's Department of Nuclear Safety and Security attended also. The new interns are: Sarmadi Almecci (SGIT/IIE), Jeffrey Easley (SGIT/ISH), Mike Fayer (SGIT/ISH), James Garner (SGIT/JNFL), Lauren Ginsberg (SGIT/IIE), Holli Hoerchelman (SGOC/OCP), Maria Ivkovic (SGIT/IIS), David Kamran (SGIT/IIS), Mark Laughter (SGIT/IIS), Patrick Lynch (SGIT/SIAU), Victoria Pratt (SGIT/TNS), Lawrence Taylor (SGIT/ISH), William Wanderer (SGIT/IIS), and Santhosh Xavier (SGCP/PSA). Three interns will begin their internship in July. The remaining interns will begin in September 2005. Travel authorizations and appointments will be made for interns starting in July. Arrangements are being made with the IAEA to hold a site specific orientation at the VIC in September.
	D.141.08	•	BNL	\$22,000.00	\$4,445.00	
						This task will begin next quarter.
	D.141.08	}	LANL	\$45,800.00	\$0.00	
						This task will begin next quarter.
D.146		Quality Control Verification Software for Mel States Nuclear Material Accounting Reports Agency [USA D 1429 / X. Wang]				
			SAIC	\$135,000.00	\$133,197.78	3
						The IAEA completed QCVS acceptance testing and signed the User Acceptance Letter, closing the User Acceptance Testing Phase of the

Acceptance Letter, closing the User Acceptance Testing Phase of the project. The IAEA and AWST planned the Maintenance Phase. IAEA will be responsible for external testing and collection of feedback from selected member states and for prioritization of change requests. AWST will be responsible for updating the QCVS documentation to reflect the "as built" software, implementing high-priority change requests, and supporting other QCVS issues within the available budget. AWST drafted an updated version of the QCVS Software Design Document which will be reviewed, revised, and delivered to the IAEA. AWST implemented two software change requests from the IAEA and provided responses to three user questions.

		Title				
TaskID D.148	Subtasl	K [Agency# / Task Officer] Expert - Special Technology Coordinator [USA D 1443 / M. Nicholas]	Organization	Total Budget	Total Spent	Comments
			CFE	\$438,200.00	\$292,434.00) The expert John Hilliard served on a steering committee that oversees a
						technology team, an analysts team, and an outside expert team for improving information analysis tools. Mr. Hilliard continued work as project leader of the team who is creating a new user interface, or open source portal, for the Department of Safeguards. He continued to work closely with Verity consultants on the migration from Search 97 to the K2 Enterprise system, which is in its final stages of completion. Mr. Hilliard has started the procurement process on many new analysis tools such as LAS, I2, Inxight, Systrans, and Language Weaver. These tools are expected to enhance the IAEA's information analysis
D.149		Specialist Training for IAEA's Imagery Analy [USA B 1442 / F. Claude]	ysts			
	D.149.01	-	IAEA	\$8,501.00	\$8,501.00	
						The IAEA has deferred additional training in satellite imagery analysis, until a decision is reached as to how to proceed with the satellite imagery analysis laboratory upgrade. Training needs are expected to be understood by the third quarter. This Subtaskk is on stand by.
D.150		Expert - Systems Analyst [USA D 1460 / J. Smith]				
			CFE	\$428,100.00	\$290,183.00	
						The expert Scott Miller completed the Additional Protocol/Complimentary Access Tracking System (CATS) software. Both SGOA and SGOC have been tracking document packages since February. Mr. Miller worked with SGOB to get the necessary scanners and printers set up for both IDP and CATS tracking. He gave training courses on the software to the support staff. Mr. Miller developed a training server that provides online "live" training in the use of the software. SGOB began using CATS to track their document packages in April. All operations divisions are using CATS to track their document packages successfully. Mr. Miller gathered requirements for a major enhancement of the Additional Protocol/Complimentary Access System, which will improve the usability of the software so that inspectors and support staff are more effective in using the Complimentary Access System. This will involve improvements to the central Complementary Access and Additional Protocol Systems and software for mobile use.
D.151		IAEA Safeguards Information System Re-en Project	gineering			
		[USA D 1461 / L. Costantini]	TDD	#0.00	# 0.00	
			TBD	\$0.00		This task provides a mechanism for POTAS-funded support to the ISIS Re-engineering Project. Non-POTAS support is tracked under Task SP.62. There are no activities funded under this task at present.

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TaskID D.152	Software, Hardware and Database Provision for Satellite Imagery Analysis Support	ganization	Total Budget	Total Spent	Comments
	[USA D 1477 / F. Claude]	IAEA	\$100,000.00	\$0.00	There has been no activity reported for this quarter.
D.153	Junior Professional Officer for the JNFL Project [USA X 1513 / S. Johnson]				
		IAEA	\$102,000.00		Gregory Gerrein will begin his Junior Professional Office position in the INFL Project Office on July 4, 2005.
D.154	Expert - IAEA Safeguards Information System Re-engineering Project [USA D 1520 / L. Costantini]				
	[60.15 10207 21 00018111111]	IAEA	\$230,000.00		The SSTS approved a revised scope of work for this CFE position in lune. Richard Watts received a job offer from the IAEA shortly afterwards. Mr. Watts is considering the offer.
D.155	Imagery Analyst [USA D 1519 / F. Claude]				
		IAEA	\$50,000.00		The Department of Defense held a meeting in June to consider candidates for this position.
D.156	Software Development Support: LIMS for the SAI [USA D 1523 / S. Balsley]	_			
		IAEA	\$55,000.00		This task involves a contract with Construx Software to conduct Phase 1 of the new Laboratory Information Management System (LIMS). Construx is scheduled to deliver the final report in mid September.
D.157	Windows/Office 2003 Migration for Safeguards [USA D 1548 / R. Gronvius]	IAEA	¢97.750.00	\$0.00	
D.158	Expert - Design, Development and Implementation Data Collection and Evaluation Software for RRP		\$87,750.00	\$0.00	
	[USA D 1556 / R. Gaetano]	IAEA	\$100,000.00	\$0.00	

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TaskID D.159	Title Subtask [Agency# / Task Officer] Design and Definition for an Enhance Analysis Architecture [USA D 1564 / Murray]	Organization d Information	Total Budget	Total Spent	Comments
		Azura Media	\$5,200.00	\$0.00	
		LLNL	\$16,000.00	\$0.00	
		MITRE	\$8,600.00	\$0.00	
		SNL	\$14,000.00	\$0.00	
E.119	Upgrading of GARS Review Software Factory Support [USA E 1249 / B Wishard]	and Software			
	E.119.01	Aquila	\$110,000.00		quila is expending the final funding for the original task. Funding has

been approved for the follow-on task. Aquila expects an RFQ for the follow-on funding by the end of July.

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	Title				
TaskID E.122	Subtask [Agency# / Task Officer] URM Systems Standardization and Support [USA E 1274 / K. Ferstl]	Organization	Total Budget	Total Spent	Comments
	E.122.02	LANL	\$70,000.00	Review 3.1.0.2 ind 2005. Radiation F formats. Radiatio the original file for	for VXI Integrated Fuel Monitor (VIFM) - Radiation cluded with Baseline 1 Rev 2 was released in April Review was modified to support reading new VIFM file in Review released with Baseline 1 Rev 2 supported mats produced by the ADAM VIFM system. Radiation modified to read the newest VIFM file format in ginal file format.
	E.122.03	LANL	\$140,000.00	\$36,998.00 Performance Rev this quarter.	ew Software - There has been no activity reported for
	E.122.04	LANL	\$314,000.00	completing MICGI Specification was Windows XP and anticipation of tes that they are up-t completed on the file manager fund Watch Window in Uninterruptible Pe Ray and Neutron firmware version), all versions of MG communications of Multiplicity Shift R Shift Register (JS	Collect Generic Module (MICGM) - Work continued on M. An update to the MICGM Software Interface completed and provided via email to the IAEA. Windows 2000 clean machines were set up in ting. The MICGM prototype modules were modified so o-date with the MIC 1.9.0.7 code. Coding was MICGM modules for MIC manager client (excluding the tionality), Direct Serial communications component, strument component, American Power Conversion over Supply instrument component, original Gamma Detector (GRAND) instrument component (pre-MG 4.10 MIC 1.9.0.7 GRAND instrument component (handles firmware), Intelligent Local Node (ILON) component, Intelligent Shift Register/Advanced egister (ISR/AMSR) instrument component, Jomar R) instrument component, and Event instrument ng was started on the multi-channel analyzer (MCA) nent.
	E.122.06	LANL	\$489,000.00	ACDs to Keith Tol installation. Final Aquila to for use i	nication Device (ACD) - LANL delivered two prototype k at the IAEA for testing, prior to the Rokkasho (slightly modified) Gerber files were provided to building fifty ACDs for the IAEA Rokkasho met with Aquila regarding the ACD build.
	E.122.08	LANL	\$157,000.00	Multi-Instrument C release in April 20 document was up Unattended and F was updated to re	oring System (UMS) Software Modifications - Collect 1.7.0.9 was included with the Baseline 1 Rev 2 105. The Software Requirements Specification dated to show that the software was for the Remote Monitoring (UNARM) project. The appendix flect the LANL assessment of completed items. The it was sent to Max Aparo on April 22, 2005. LANL is eedback.

	Title				
TaskID	Subtask [Agency# / Task Officer] E.122.09	Organization LANL	Total Budget \$77,700.00	Total Spent \$69,900.00	Comments
	E.122.09	LAINL	\$11,100.00	Ci up ta Li re	ompletion and Delivery of Baseline 1 - All issues and software odates which were requested during the UNARM Baseline 1 training sk were recorded and sent to the IAEA (LA-UR-05-2734, "LANL Issues st From Vienna Visits: June '04, February '05"). The accumulated list effected the items that had been closed or converted into change equests, discrepancy reports, and open issues. The Subtaskk is
	E.122.10	LANL	\$100,000.00	\$103,100.00	
				Is re fro IA pr	tudy to Convert IAEA Neutron Coincidence Counting (INCC) and otopic Review (ISO) to Component Object Modules (COMs) - The equired interface specification documents for COM modules derived from the INCC and ISO codes have been written and delivered to the IEA. A proposal for implementing the specified modules was resented at the May SSTS meeting. The FY05 portion of that proposal as approved.
	E.122.11	LANL	\$121,000.00	\$61,074.00	
					eneric Software Components for the Chernobyl Conditioning Facility - lease see Task E.130.01.
	E.122.12	LANL	\$241,077.00	\$40,193.00	
				pr sc ta pr C	ecomposition of Analysis Modules - Interface documentation for roposed import and analysis COMs has been written. The work chedule was rearranged to document the proposed COMs under this sk, to meet the needs of the Nondestructive Assay Review (NDAR) roject. A document has been written for interfaces for CoSrImport, oAdcImport, CoSrMeasurementsAnalysis, CoDirectionAnalysis, and oIntegrityAnalysis.
	E.122.13	LANL	\$288,000.00	\$70,780.00	
				ta th L/ cc sc C	ontrol Board and Baseline Release Management and Support - This sk was created to establish a software control board to better manage e Unattended and Remote Monitoring (UNARM) software product from ANL's N-1 group. The software board has met weekly to discuss ontrol board processes, and the status and schedule of UNARM oftware releases. The board has generated thirty-one new Software hange Requests out of a total of eighty-two. Twenty-two change equests have been closed. The generation, updating, and tracking of

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these change requests has become time consuming. Therefore, the board evaluated commercial software with these capabilities. Serena ChangeMan Professional Product was selected, purchased, and installed onto a local server. LANL is building its process flow using the tool and plans to transition, within the next month, to using the tool

for software issue tracking. The control board managed the development and testing of UNARM Baseline 1 revision 2, which was

delivered to the IAEA on April 1, 2005.

	Title					
TaskID	Subtask [Agency# / Task Officer]	Organization	Total Budget	•	-	
	E.122.14	LANL	\$85,500.00	(\$500.00) INCC and ISO Com Conversion - This Subtaskk is for the conversion the INCC and ISO codes to component object modules (COM's), whare planned for use at Rokkasho and other IAEA monitoring system Funding was approved at the May SSTS meeting. Due to an IAEA change in priority on Rokkasho projects, the SSTS approved shifting this funding from E.122.14 to A.247.19, by phone poll in July. E.12 will be deferred until FY06 and the arrival of FY06 funding.	INCC and IS the INCC ar are planned Funding wa change in p this funding	, which tems. EA ifting
	E.122.15	LANL	\$55,000.00	\$0.00	\$0.00	
E.125	Remote Monitoring and Unattended Surveillance Systems [USA E 1330 / M. Aparo]	Digital				
	E.125.13	LANL	\$69,000.00	\$20,708.00	\$20,708.00	
				Optical Imaging Sensor Development Support - There has been no activity reported for this quarter.		no
E.126	Expert - Safeguards Equipment Syst Security (Tolk) [USA E 1339 / M. Aparo]	ems Information				
		CFE	\$715,700.00	\$570,643.00	\$570,643.00	
				The expert Keith Tolk traveled to RRP to plan for the upcoming installation of the IJPD authentication hardware and to configure the		the

Ine expert Keith Tolk traveled to RRP to plan for the upcoming installation of the IJPD authentication hardware and to configure the Local Cabinets. Mr. Tolk surveyed each of the IJPD installation sites with the Japanese contractor who will install the bulk of the hardware. He visited eighteen of the Local Cabinets, where he installed/configured the Netscreen firewall devices, installed the latest version of Sign and Forward, and ensured that the computers in the cabinet were properly signing and/or forwarding data to the Raw Data Base. Mr. Tolk conducted tests in preparation for the first test installation of the IJPD authentication hardware, scheduled for July. He drafted a new version of the policy on Joint Use Equipment. Mr. Tolk edited the document to include revisions from several reviewers.

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TaskID E.127		Title [Agency# / Task Officer] Or Expert - Remote Monitored Surveillance Systems Development and Implementation Coordination (Regula) [USA E 1350 / M. Aparo]	0	Total Budget	Total Spent	Comments
			CFE	\$584,700.00	\$441,191.0	0
E.130		Integrated Safeguard System for SF Conditioning Facility (Part 2/3 of Chernobyl Transfer and Conditioning Campaign)	9			The expert James Regula installed a satellite pilot project, in cooperation with the European Space Agency at SXM in Slovakia, for a three month pilot test. The satellite is running the standard Safeguards (SG) VPN tunnel over the link and has been in operation since April 7 without problems. The satellite capability gives SGTS another method of data transfer, especially favorable in geographic areas where communications infrastructure is lacking. Mr. Regula traveled to Canada for three weeks to upgrade remote monitoring (RM) communications. He moved all SG equipment to a 'LAN-Sharing' configuration at the Bruce facility to transport data back to the SG regional office in Toronto. Two DMOS units at Darlington were hooked to xDSL lines, which is the first time that this has been offered to an outside user in a Canadian facility. Mr. Regula's testing of new transfer software for both VIFM and DMOS will be completed for the RM deployment at Cernavoda, Romania, in early July. He has developed a Terminal Server solution to enable VIFM technicians in Vienna to access remote Canadian VIFM computers for troubleshooting and maintenance.
	E 400.04	[USA E 1361 / G. Ingrao]	LANII	#4 005 000 00	#4 000 000 0	2
	E.130.01		LANL	\$1,305,000.00	\$1,302,988.0	MiniGRAND 4.10, MultiInstrument Collect 1.7.0.9, and Radiation Review 3.1.0.2 included with Baseline 1 Rev 2 were released in April 2005. The IAEA has agreed to accept the Digital Video Review with the latest Aquila I15 control. LANL outlined the limitations of this approach in an email on April 22, 2005. Max Aparo approved delivery of this version in his email on April 28, 2005. He stated that he would work with Aquila on an upgrade, which addresses the problems of the files not being put into day files. The analysis tool for MiniGRAND parameters called Data Filtering Program (DaFi) is being developed.
	E.130.01		Sonalysts	\$331,227.00	\$324,464.0	
						The Agency is making preparations to install the upgraded MMCT at Chernobyl. SNL and Aquila Technologies have completed modifications to the MMCT. They will ship the upgraded MMCT to the Agency in July. The Agency and SNL will install the MMCT at Chernobyl in September 2005, after testing at the Agency.

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		Title				
TaskID	Subtask	x [Agency# / Task Officer]	Organization	Total Budget	Total Spen	t Comments
E.131		Testing/Evaluation Programme for Unattender Monitoring and Surveillance System's Compu- Software Operating System [USA E 1370 / G. Rengarajan]				
	E.131.04		LANL	\$86,900.00	\$84,300.0	0
						Multi-Instrument Collect (MIC)/Windows XP Certification - LANL has indicated that this project has been completed. ISPO needs to review this project to ensure all deliverables have been received, prior to obtaining closeout concurrence from IAEA.
E.133		2002 Factory Support for DIS				
		[USA E 1108 / B. Wishard]				
	E.133.01		Aquila	\$513,301.09	\$484,841.0	00
						Kent Brown and Anthony Gonzales continued to provide factory support for the IAEA's existing digital imaging surveillance (DIS) systems. Mr. Brown provided technical assistance for SDIS validation testing and future upgrading. He continued testing GARS hardware platforms for field use. Mr. Brown defined requirements for the upgrades of support software for DIS systems. Initial planning has begun to process GARS surveillance data on the SG LAN. Mr. Brown traveled to Switzerland for troubleshooting and upgrading of two SDIS systems. Anthony Gonzales continued testing and upgrading DIS equipment for field use. He continued to provide liaison support with the factory for DCM 14 upgrades. Mr. Gonzales will participate in the implementation of the replacement of DCM 14 backup batteries program by performing testing, conducting training, managing logistics, and updating documentation.
	E.133.02		Aquila	\$398,125.91	\$161,567.9	1
	E.133.03		IAEA	\$134,000.00	\$14,532.0	Factory support funding is still being provided under Task E.133.01.
						Aquila received an RFQ for a third factory support representative. They submitted a proposal to the IAEA for Mr. Vio Popescu to provide this support. The proposal is in IAEA procurement, undergoing final evaluation. Aquila expects to receive an order by the end of July.

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TaskID E.134	Subtask	Title [Agency# / Task Officer] Mobile Safeguard System for SF Transportat Chernobyl NPP to Conditioning Facility [USA E 1375 / G. Ingrao]	Organization ion from	Total Budget	Total Spent Comments
			IAEA	\$55,000.00	\$55,000.00
	E.134.01		SNL	\$805,355.28	\$757,249.00
					Assembly of the first system has been completed, new software has been installed, and the system is undergoing functional testing prior to shipment. The target shipping date to the IAEA is July 1, 2005. Don Glidewell (SNL) and Mike White (Aquila) discussed the project with Goran Af Ekenstam, Aleh Zatsepin, Giovanni Ingrao, and Jim Halbig (IAEA), during the USSP-IAEA Annual Review Meeting in Vienna during the week of June 6. A tentative installation date of August 29 to September 2, 2005 was established.
	E.134.02		LANL	\$257,000.00	\$259,295.00
					The remaining software work for the MMCT system upgrade will be completed and LANL will issue a report summarizing the work.
	E.134.03		Aquila	\$121,250.00	\$64,088.00
					MMCT system number 2 has been reengineered and is undergoing testing. The anticipated shipping date to the IAEA is July 1, 2005.
E.135		Safeguards Systems for Chernobyl SF Long Storage (Part 3/3 of Chernobyl Transfer and Conditioning Campaign) [USA E 1376 / G. Ingrao]	Term Dry		
	E.135.01	[00/(1 10/0/ 0. mg/do]	LANL	\$3,923.00	\$3,923.00
					This task is on stand by.
E.137		Next Generation Camera Module and Server- Surveillance Systems [USA JNT E 1437 / B. Wishard]	-Based		
	E.137.01		Sonalysts	\$109,666.00	\$86,240.00
					Aquila and Dr. Neumann Consulting have started work designing the NGSS. Dr. Neumann is focusing initially on selecting and testing the components, which will be used to build the NGSS. Aquila conducted a planning meeting with Max Aparo (IAEA) to discuss the user requirements for the review software. The NGSS team will hold a project status meeting in October 2005.
	E.137.02		IAEA	\$160,000.00	\$0.00
					Phase I Development of the NGSS is ongoing. Equipment testing at the Prater Reactor in Vienna has been initiated. The IAEA, Aquila, and Dr. Neumann Consulting (DNC) met on May 30 and 31 for a Review Software Strategy Meeting, to discuss the review software architecture.

TaskID E.139	Title Subtask [Agency# / Task Officer] Expert - Digital Image Surveillance, Unattend Monitoring System Integration and Remote Systems Engineer		Total Budget	Total Spent	t Comments
	[USA E 1463 / M. Aparo]	OFF	#254.000.00	\$000 77 0 0	0
		CFE	\$354,900.00	\$233,779.0	The expert Lee ReFalo made two trips to Lithuania. The first trip supported the spent fuel transfer monitor (SFTM) and GRAND3 to MiniGRAND upgrade. The second trip was for the replacement of the central data collection computer and to install network connection to the SFTM. Mr. ReFalo participated in meetings on the design of, and IAEA requirements for, a new reactor fuel transfer monitor (RFTM). Funding has been approved. The ordering process has begun. Mr. ReFalo tested the LANL Baseline 1 Rev 2 software release. He documented his observations and provided them to the task officer. Mr. ReFalo traveled to Japan to set up a connection between the TRO office and the Japanese NMCC office, for direct transfer of PFPF remote monitoring data. During a visit to Monju, he discussed equipment/design verification activities which will be necessary for the planned facility startup.
E.140	Enhancement of Cobra Fibre Optic Seal Sys	tem			
	[USA E 1475 / G. Weeks]	IAEA	\$346,000.00	\$141,400.0	0
			ψ040,000.00	ψ141,400.0	Aquila met with the IAEA Task Officer on June 6, 2005, to coordinate development activities. The laboratory prototype has been resized and upgraded. Experiments with an upgraded seal mold are ongoing.
E.142	Vulnerability Assessment of EOSS and IRES Electronic Seals [USA E 1509 / M. Goldfarb]	3			
		SNL	\$177,000.00	\$117,488.0	0
					SNL completed the software/firmware vulnerability assessment (VA) of the EOSS in April 2005. The draft Final Report was sent to the IAEA on April 28, 2005. Don Glidewell met with Michael Goldfarb and George Weeks (IAEA) at the USSP-IAEA Annual Review Meeting in Vienna during the week of June 6. The IAEA has accepted the Final Report as drafted. A version marked "Final" will be forwarded to the IAEA, completing this task. The IAEA will initiate a small follow-on task for a very specific VA of the foil membrane in the seal.
E.143	Junior Professional Officer - Engineers Sup Unattended Monitoring	port to			
	[/]	IAEA	\$90,000.00	\$39,101.0	0
					The IAEA selected Nina Wilson for this Junior Professional Officer (JPO) position. The SSTS approved the position at its April 7, 2005, meeting. The IAEA offered the position officially to Ms. Wilson in June. Ms. Wilson attended the intern orientation at BNL on May 16 (see Task D.141.07). She is expected to begin her JPO assignment in July.

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TaskID E.144	Title Subtask [Agency# / Task Officer] Ultrasonically Interrogated Metal Seal [USA E 1532 / M. Goldfarb]	Organization	Total Budget	Total Spent	Comments
		INL	\$15,000.00	conduct a f	approved funding at its April 7, 2005, meeting for INL to easibility study for verifying the IAEA's metal seal in situ, sonic techniques.
E.145	VOID-3 Vulnerability Assessment [USA E 1533 / H. Undem]	PNNL	\$100,000.00	conduct a f	approved funding at its April 7, 2005, meeting for PNNL to easibility study for verifying the IAEA's metal seal in situ, sonic techniques.
	[OOA 2 TOOO/TH. OHIGHIN]	LANL	\$296,000.00	conduct vul (the current seal prototy resistant fe developme (Task 4) an	approved funding at its April 7, 2005, meeting for LANL to inerability assessments (VAs) of the VOID-2 adhesive seal tly used seal), the new VOID-3 seal design, and the VOID-3 rpes (Task 1). Assessments of the real-time counterfeit atures (Task 2) and forensic key features (Task 3), and the nt of operational protocol and an inspector training program e included. The IAEA has contracted with Avery-Dennison to e seal in partnership with the VA team, using regular budget
E.146	Feasibility Study for Change Detection So Applied to Metal Seal Signatures [USA E 1534 / H. Undem]	oftware			
		INL	\$52,000.00	conduct a f Software fo	approved funding at its April 7, 2005, meeting for INL to easibility study to evaluate use of INL's Change Detection or accelerating the verification process of the IAEA's metal seals laboratory.
E.147	MMS Software Update [USA E 1535 / G. Weeks]				
		SNL	\$25,206.00	experts to a upgrading t	approved funding at its April 7, 2005, meeting for SNL attend a meeting in Vienna to discuss the requirements for the Material Management System (MMS) architecture and the K-Area Storage facility (Savannah River Site).
		SRNL	\$8,000.00	expert to at upgrading t	approved funding at its April 7, 2005, meeting for an SRS tend a meeting in Vienna to discuss the requirements for the Material Management System (MMS) architecture and the K-Area Storage facility (Savannah River Site).

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TaskID E.148	Title Subtask [Agency# / Task Officer] Expert - Senior Sealing Systems Engineer [/]	Organization	Total Budget	Total Spent	Comments
		CFE	\$0.00	\$0.00	
F.032	Consultant - Services Safeguards Issues (R [USA C 1134 / J. Cooley]	. Hooper)			
	-	IAEA	\$609,336.87	\$523,448.00	
				sa co	he consultant Richard Hooper presented the seminar on strengthened afeguards during the week of May 9 to twenty-two participants. He ontinued working on revising and updating the presentation material he seminar will be given again in 2005 and in 2006.
F.036	Fixed Term Assistant - Procurement Service [USA F 1472 / A. Hamilton]	es			
		IAEA	\$356,000.00	\$0.00	
				pr R G va If (C B th ef T W B fo R dc pl W	the expert Philip Beauparlant entered into negotiations with the proposed contractor for IAEA Safeguards Information System (ISIS) e-engineering Project (IRP). A meeting was held with the Director eneral on March 10, 2005, to discuss the project and find a solution to arious issues of concern. Contract negotiations concluded for the ISIS RP. The contract was awarded to Cap Gemini Ernst & Young CGE&Y) on June 7, 2005. IRP Management expressed interest that Mr. eauparlant act in the role of project manager for the initial stages of le IRP Project. Mr. Beauparlant has received a SOW for additional forts with AWST for the Integrated Inspector Information (I3S) system. The request for proposal was released on May 13, 2005. The proposal has received on May 27, 2005, and submitted to the PAC. Mr. eauparlant has received various requests for equipment procurement or the Rokkasho program. These are in process. Proposals for the okkasho program were received May 19 and are awaiting boumentation from Technical Representatives. Mr. Beauparlant has acced other various safeguards related procurements. He has received PAC approval for Training Support for Quality Management Workshops lith Stat-A-Matrix (SAM). The contract amendment has been drafted and is awaiting formalization from OLA.
S.026	The Design and Development of an Oriental for U.S. CFEs and IAEA Staff [USA X 943 /]	tion Course			
	• • • • •	ISPO	\$395,487.00	\$395,487.00	
					SPO is determining how to proceed with the project, due to illness of e contractor.

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TaskID S.036	Title Subtask [Agency# / Task Officer] Integrated Safeguards Consultations [USA X 1315 / L. Gourgon]	Organization	Total Budget	Total Spent	Comments
		BNL/NCT	\$799,245.00		The final report on the analysis of integrated safeguards approaches at light water reactors is in preparation and will be circulated for comment at the end of August.
		ISPO	\$32,349.00	\$32,349.00	
		LLNL	\$12,300.00	\$12,300.00	
		ORNL	\$33,875.00	\$33,875.00	
		PNNL	\$25,000.00	\$24,505.00	
		SNL	\$9,894.51	\$9,894.51	
S.037	ISPO Recruitment Program [USA X 942 /]				
		ISPO	\$276,422.00		Michele Rabatin and Donna Occhiogrosso attended the Electric Power Meeting, which was held in Chicago from April 4 to 6, 2005, where they distributed recruitment information. ISPO planned for the INMM Annual Meeting in July 2005 and several other trade shows that will be held in the fall.
S.049	IAEA Travel for US Support Program Tasl [USA X 1306 / A. Hamilton]				
		IAEA	\$1,723,024.00) This task provides funding to the IAEA for task related travel. The SSTS responds to quarterly travel projections prepared by the IAEA's Support Program Administration.
S.053	Non-Proliferation and Disarmament (NDF) SG Equipment [USA X 1342 / B. Bartsiotas]) Funding for			
	[USA A 1342 / B. Dalisiulas]	ISPO	\$3,106,000.00		This task was established to track the expenditure of funding provided through the Nonproliferation and Disarmament Fund (NDF) in 2000. The NDF approved funding in 2000 for the procurement of geospatial laboratory and digital image surveillance equipment. ISPO, the IAEA, and the State Department's NDF office are working together to expend the remaining funding and to close out this account.

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TaskID S.057	Title Subtask [Agency# / Task Officer] USVC Funding in 2001 for SG Equipment [USA X 1393 / B. Bartsiotas]	Organization	Total Budget	Total Spent	Comments
	[oortx 1000 / D. Dartolouo]	IAEA	\$10,154,770.44	p	This task was established to track the IAEA's expenditure of funding provided in the 2001 US Voluntary Contribution for the procurement of Safeguards equipment.
S.060	Contracts Labor Charge [/]				
		ISPO	\$211,707.00	\$148,560.00	
				E	This task provides funding for the labor charges that are incurred by the BNL Procurement and Property Management Division, while executing contracts and purchase orders for USSP tasks.
S.061	2002 U.S. Voluntary Contribution for Safe Equipment [USA X 1490 / B. Bartsiotas]	guards			
	[OOA X 14907 B. Baltslotas]	IAEA	\$6,634,575.73		This task was established to track the expenditure of the 2002 US
S.062	ISIS Reengineering [USA D 1491 / M. Strohmayer]			\	/oluntary Contribution for Safeguards Equipment.
	[667.2 1.617 1.11	IAEA	\$9,069,516.67	\$358,741.00	
				- 	This task was established to track US Voluntary Contributions to the SIS Reengineering Project. The IAEA selected Cap Gemini Ernst & Young (CGE&Y), based on an extensive bid evaluation. The contract was signed by the IAEA and CGE&Y on June 7, 2005, in Vienna.
	S.062.01	IAEA	\$612,943.33	\$412,943.33	
					NPT Accounting Software - There has been no activity reported for this quarter.
S.065	NDF 2002				
		IAEA	\$4,155,000.00	\$2,132,531.00	
				t) ti	This task was established to track the expenditure of funding provided hrough the Nonproliferation and Disarmament Fund (NDF) in 2002. The NDF approved funding for high priority NDA and surveillance equipment. ISPO, the IAEA, and the State Department's NDF office are working ogether to expend the remainder of the funding and to close out the account.

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TaskID S.066	Title Subtask [Agency# / Task Officer] 2003 USVC for Safeguards Equipment [/]	Organization	Total Budget	Total Spent Comments	Total Spent	
		IAEA	\$7,700,000.00	\$2,928,308.68 This task was established to track the IAEA's expenditure of funding provided in the 2003 US Voluntary Contribution for the procurement Safeguards equipment.	This task provided	
S.068	Information and Communication Technolog Conference	у				
	[/]	ISPO	\$20,000.00	\$0.00 There was no activity scheduled for this quarter at LANL, LLNL, OF PNNL, SNL, or in the private sector.	There wa	ORNL,
		LANL	\$10,000.00	\$11,000.00		
		LLNL	\$10,000.00	\$0.00	\$0.00	
		ORNL	\$9,925.00	\$9,925.00	\$9,925.00	
		PNNL	\$10,000.00	\$9,847.00	\$9,847.00	
		SNL	\$10,000.00	\$5,821.00	\$5,821.00	
		Sonalysts	\$85,000.00	\$71,034.00 There has been no activity reported for this quarter. The Agency is reviewing the draft conference report. Sonalysts will finalize the repand submit it to the Agency and ISPO for publication, upon receipt the Agency's comments.	There har reviewing and subj	report
S.069	2004 USVC for Safeguards Equipment [/]	IAEA	\$4,359,600.00	\$1,178,229.44 This task was established to track the IAEA's expenditure of funding provided in the 2004 US Voluntary Contribution for the procurement Safeguards equipment.	This task provided	

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TaskID S.071	Title Subtask [Agency# / Task Officer] NDA Training Course Relocation [/]	Organization	Total Budget	Total Spent	Comments
		IAEA	\$5,000.00	\$0.00	
		INL	\$45,000.00	\$14,254.00	nere has been no activity reported for this quarter.
		INL	\$45,000.00	IN fo IN re	IL is performing a documented safety analysis (DSA) review of all rmer ANL-West facilities, due to the transition of ANL-West into the IL. The DSA should be completed by the end of August 2005. This view will help establish the work scope for relocating the IAEA NDA burse to INL.
		ISPO	\$36,000.00	(\$1,060.00)	
				TI	nere has been no activity reported for this quarter.
		LANL	\$24,000.00	\$23,500.00	
				Ti	nere has been no activity reported for this quarter.
		SRNL	\$4,000.00	\$0.00	
				TI	nere has been no activity reported for this quarter.
S.072	Technical Meeting on Novel Technolog discussion of OIOS MSSP Management Washington, February 24-25, 2005 [/]				
	• •	IAEA	\$0.00	\$0.00	
				ac m	nis task is on stand by, awaiting proposals from the IAEA for new ctivity related to novel technologies. There are several related eetings planned for later in 2005, such as the Noble Gas meeting order Task A.262.
S.073	2005 USVC for Safeguards Equipment				
	[/]				
	- •	IAEA	\$4,352,485.00	\$0.00	
				pr pr	nis task was established to track the IAEA's expenditure of funding ovided in the 2005 US Voluntary Contribution (USVC) for the ocurement of Safeguards equipment. The IAEA's request for ctrabudgetary funding for safeguards equipment was received on Mar

Inis task was established to track the IAEA's expenditure of funding provided in the 2005 US Voluntary Contribution (USVC) for the procurement of Safeguards equipment. The IAEA's request for extrabudgetary funding for safeguards equipment was received on March 24, 2005, and reviewed by the SSTS at its May 18, 2005, meeting. The SSTS approved the IAEA's request for equipment funding with specific modifications and conditions. The SSTS approved the use of remaining USVC funding from previous years (Tasks SP.57, SP.61, SP.66, and SP.69) for this year's equipment request, with the proviso that the IAEA use funding from previous years before using funding from the 2005 USVC. This will ensure that any remaining unobligated funding would belong to the 2005 USVC.

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TaskID S.074	Title Subtask [Agency# / Task Officer] Enrichment Technical Meeting [/]	Organization	Total Budget	Total Spent Comments	Total Spent	
		BNL/NCT	\$6,513.00	\$5,828.00 Brian Boyer prepared for, and traveled in mid April to, the "Techniques for IAEA Verification of Enrichment Activities" meeting at the IAEA, to present a paper on enrichment safeguards approaches, as a member of the US delegation to the meeting. Dr. Boyer participated in the meeting's working group on detection of LEU diversion from, and misus of, declared LEU producing enrichment facilities.	Brian for IAI prese the U meeti	EA, to nember of
		LANL	\$18,000.00	\$17,900.00 Diana Langner participated in the IAEA Technical Meeting on techniques for IAEA verification of enrichment facilities held from April	Diana	m April
		LLNL	\$16,000.00	\$9,085.00 George Anzelon participated in the IAEA Technical Meeting on IAEA Verification of Enrichment Activities, which was held from April 18 to 22, 2005. Dr. Anzelon presented a talk on the role of information analysis in detection of undeclared activities. He served as Chair of Working Group 3, Detection of Undeclared Enrichment Activities.	Georg Verific 22, 20 analys	18 to on air of
		ORNL	\$15,568.00	\$15,568.00 Michael Whitaker represented ORNL at the IAEA Technical Meeting on IAEA Verification of Enrichment Activities, which was held from April 18 to 22, 2005. Mr. Whitaker participated in Working Group 2, addressing the timely detection of the misuse of a declared facility to produce higher-than-declared enrichments.	Micha IAEA to 22 the tin	April 18 Idressing
		PNNL	\$19,000.00	\$18,851.00 John Wacker (PNNL) attended the IAEA Technical Meeting on IAEA Verification of Enrichment Activities, which was held from April 18 to 22, 2005. Dr. Wacker participated in the working group on undeclared production at an undeclared enrichment facility.	John Verific 22, 20	18 to

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Organization	Total Budget	Total Spent
BNL/NCT	\$11,000.00	\$0.00
INL	\$9,500.00	\$0.00
ISPO	\$17,000.00	\$0.00
LANL	\$20,000.00	\$14,188.00
LLNL	\$9,500.00	\$0.00
ORNL	\$10,000.00	\$0.00
PNNL	\$12,000.00	\$10,617.48
SNL	\$17,000.00	\$0.00
Sonalysts	\$86,000.00	\$43,504.00

Colin Carroll and Donald Estes (Sonalysts) worked with Safeguards Information Technology (SGIT) and Safeguards Technical Services (SGTS) to prepare for the SGIT/SGTS technology workshop, which is scheduled from October 10 to 14, 2005, in Newport, Rhode Island. Sonalysts and the Agency agreed that the theme of the workshop will be "Safeguards Tools of the Future." The workshop will bring together technical experts from government, academia, and private industry to explore technology trends and to identify the equipment functionality or attributes, which will be required to support inspectors in the field. The participants will submit a report to the Agency at the conclusion of the workshop, which summarizes the technical discussions and presents a roadmap for the development and implementation of new technologies. Sonalysts, the Agency, and BNL plan to send invitations to the workshop in July 2005. The participant list will be finalized at the end of August 2005.

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Title TaskID Subtask [Agency# / Task Officer]

[/]

Safeguards Tools for the Future

S.075

TaskID S.076	Title Subtask [Agency# / Task Officer] Technical Meeting on HRGS for Analysis of Environmental Samples [/]	Organization	Total Budget	Total Spent Comments
		LANL	\$18,000.00	\$14,100.00 A Consultants' Group Meeting on High Resolution Gamma Spectrometry (HRGS) of Environmental Samples was held at the IAEA from May 25 to 27, 2005. The purpose of the meeting was to discuss HRGS data
				discrepancies within the network of analytical laboratories (NWAL) and ways to better standardize counting protocols. Presentations were made by SGCP/PSA highlighting key radionuclides, the importance of HRGS results to the evaluation process, and areas of improvement. Participants from the NWAL including LANL presented details of sample handling, counting, and data evaluation processes. The meeting resulted in a list of eighteen recommendations that the IAEA and the NWAL should pursue or investigate for improvement and standardization. A final recommendation was that the IAEA should call periodic meetings with the HRGS experts of the NWAL to review progress.
		LLNL	\$41,200.00	\$42,318.00
		ORNL	\$33,742.24	\$33,742.00 Doyle Hembree and John Keller represented ORNL at the Consultants' Group Meeting (CGM) on the use of high-resolution gamma spectrometr (HRGS) for environmental sample analysis for nuclear safeguards, held in Vienna from May 25 to 27, 2005. The CGM was hosted by the IAEA and was held to discuss the application of HRGS to nuclear safeguards and to make recommendations on improving the use of the method by the IAEA. Experts from seven countries attended.
		PNNL	\$19,000.00	\$18,903.00 Richard Arthur attended the Consultants' Group Meeting (CGM) on the use of high-resolution gamma spectrometry (HRGS) for environmental sample analysis for nuclear safeguards, held in Vienna from May 25 to 27, 2005. Discussions were held on how IAEA samples are analyzed for gamma emitting radionuclides and on how results are reported (e.g. specific isotopes, non-detects and less-than-value calculations). Sample counting time was reviewed, because the IAEA wants lower detection limits. Mr. Arthur is an expert in the analysis of environmental
W.001	Work For Others			·
	[/]	LANL	\$17,740.00	\$22,858.00 This task is used to reclaim funding from completed tasks at LANL, which will be redirected to new activities at LANL.
	W.001.01	LANL	\$0.00	(\$62,927.00)

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TaskID W.003	Title Subtask [Agency# / Task Officer] Work for Others [/]	Organization	Total Budget	Total Spent	Comments
		ORNL	\$390.00	(This task is used to reclaim Work for Others fees and funding from completed tasks at ORNL, which will be redirected to new activities at ORNL.

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